Be sure to read this Note

M3T-MR100/4 V.1.00 Release 00 Release Note

RENESAS SOLUTIONS CORPORATION

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Abstract

Welcome to M3T-MR100/4. This document contains supplementary descriptions to Manual. When you read certain items in the Manual, please read this document as well.

Also, this document contains a License Agreement in the last. Please read it before using. By using the software, you are accepting and agreeing to such term.

Contents

1. Components of the Product

M3T-MR100/4 is comprises the following. If any of the above is missing, contact either Renesas Technology Corporation's office or its distributor from which you purchased the product.

1. Software (CD-R)

    The CD-R contains the software product and electronic manual necessary for program development.

2. M3T-MR100/4 V.1.00 Release 00 Release note

    This is the latest version of the M3T-MR100/4.

3. License ID Certificate

    A license ID is required when you install this product in your computer. The License ID Certificate certifies that you are an official user of the product. Please keep this certificate in a safe place because it will be needed when the product is upgraded in the future.

2. Versions of Crosstool compatible with M3T-MR100/4 V.1.00 Release 00

You can use M3T-MR100/4 V.1.00 Release 00 in combination either with R32C/100 C compiler package V.1.01 Release 00 or later version.

3. Installing

Before installing M3T-MR100/4 in your computer, please read the "License Agreement" and "Release Note" included with the product. You need to select the same directory in installing as installing R32C/100 C compiler package.

1. Starting up the installer

- Start up the installer and follow the messages displayed on the screen as you install M3T-MR100/4.
- You need to input a license ID in the middle of installation. Before you start installing M3T-MR100/4, check your license ID.
- The data you input in the middle of installation is necessary to create a file for user registration.
- The installer programs included with the product are listed below.

Supported Host	Supported OS	Product Name	Installer Name
PC	Windows 2000 Windows XP Windows Vista	M3T-MR100K/4	Setup.exe

4. Using electronic manuals

The electronic manuals of this product are offered in PDF(Portable Document Format) files. To see these electronic manuals, use a PDF file display program such as the Adobe Reader.

● Opening electronic manual file

Electronic manuals are installed in the following directory by the installer.

Directory	PDF file	Content
manual	mr100ue.pdf	M3T-MR100/4 User's Manual in English

When you double-click on the PDF file of the electronic manual you want to see, Adobe Reader reads in the data of that manual and bring it up the display. Or after staring up Adobe Reader you can use the menus [File-Open...] to specify the electronic manual.

5. Technical Support

If what occurred in your environment doesn't replicate in our environment, we may ask a favor of you to solve the problem (there can be an instance in which we borrow your equipment). We appreciate your in-advance approval.

6. How to make M3T-MR100/4 Library

The kernel library sources and the C language I/F library sources are included in the product as follows.

Products	C Language Interface Library Source	Kernel Library Source
M3T-MR100K/4	Included(src100\c100mr)	Not included
M3T-MR100S/4 (W/O Source)	Included(src100\c100mr)	Not included
M3T-MR100S/4	Included(src100\c100mr)	Included(src100\mr100)

These libraries can be created by executing the command shown below in the directory with these source files.

make –f makefile.dos

7. Generation of application using M3T-MR100/4 in High-performance Embedded Workshop 4

An explanation is given here of the method for creating an application using the M3T-MR100/4 at the High-performance Embedded Workshop 4. The procedure is explained, taking the sample program attached to the M3T-MR100/4 as an example.
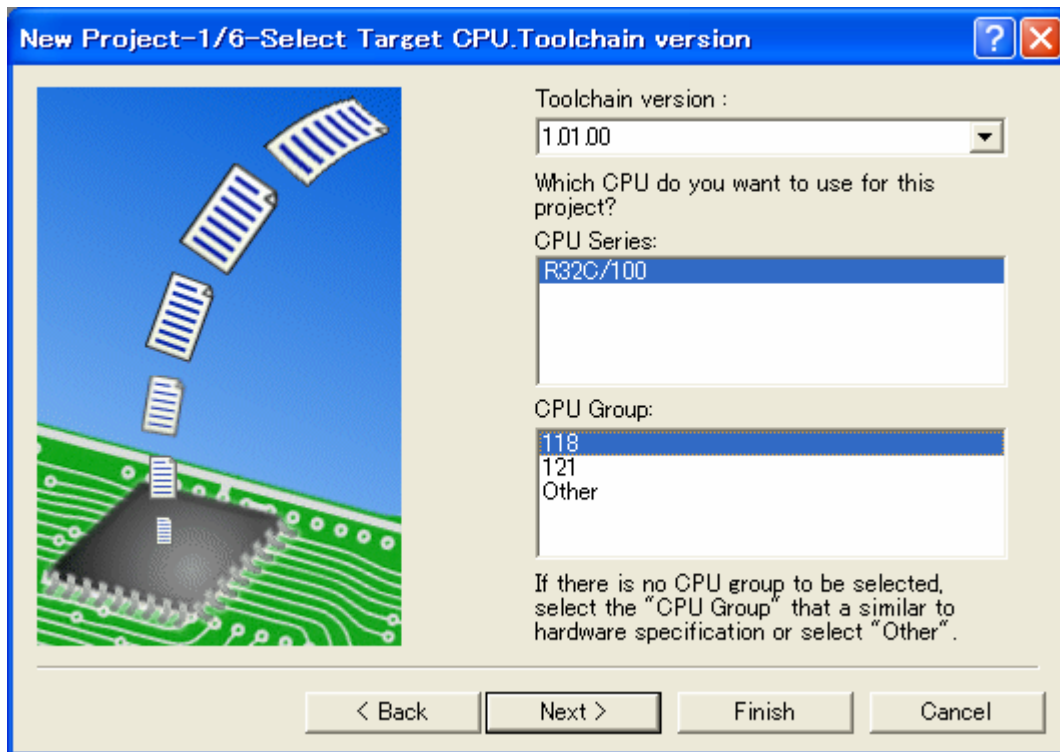
1. Generation of new project work space
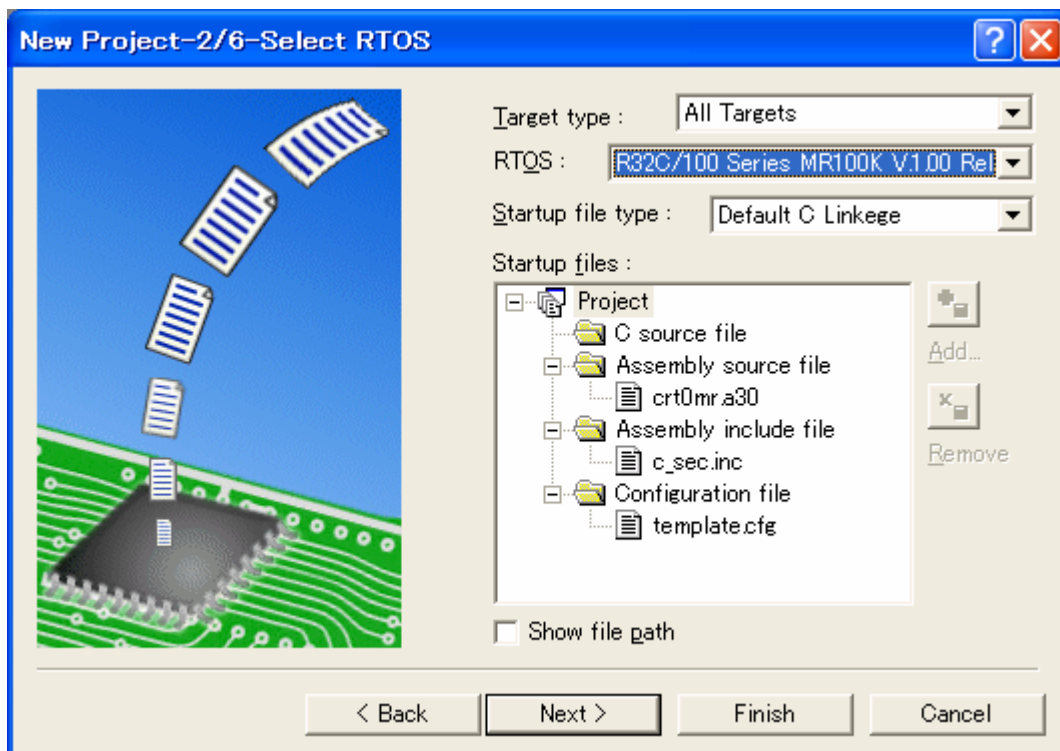   As illustrated below, create a work space as an application project.
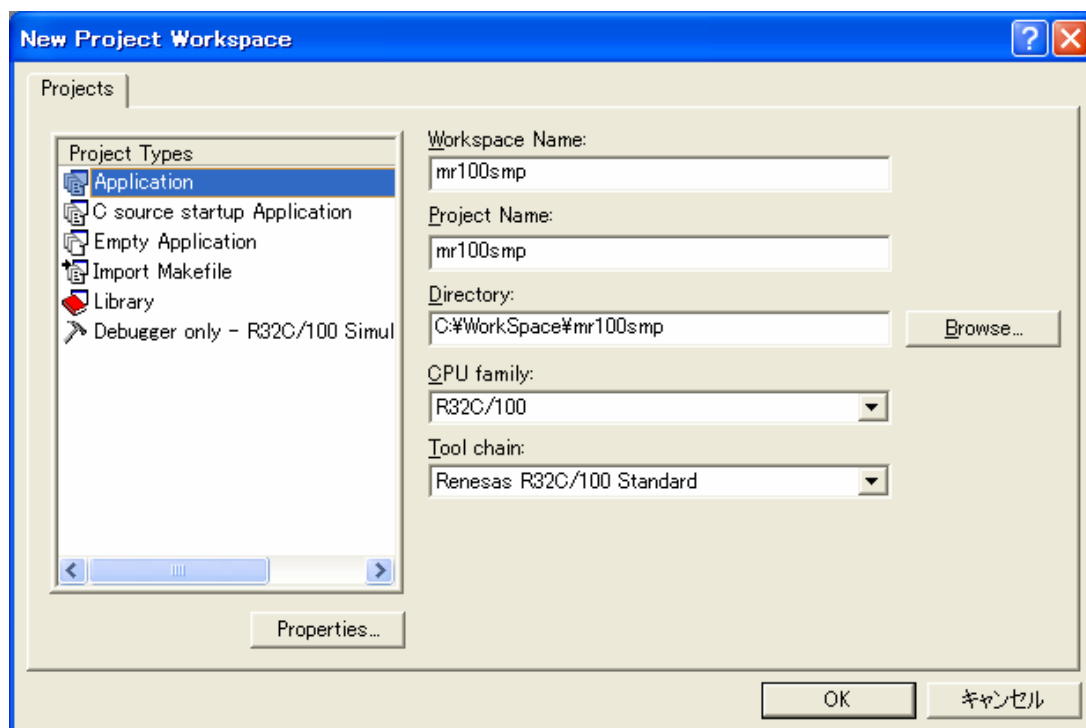
2. Tool Chain Setting
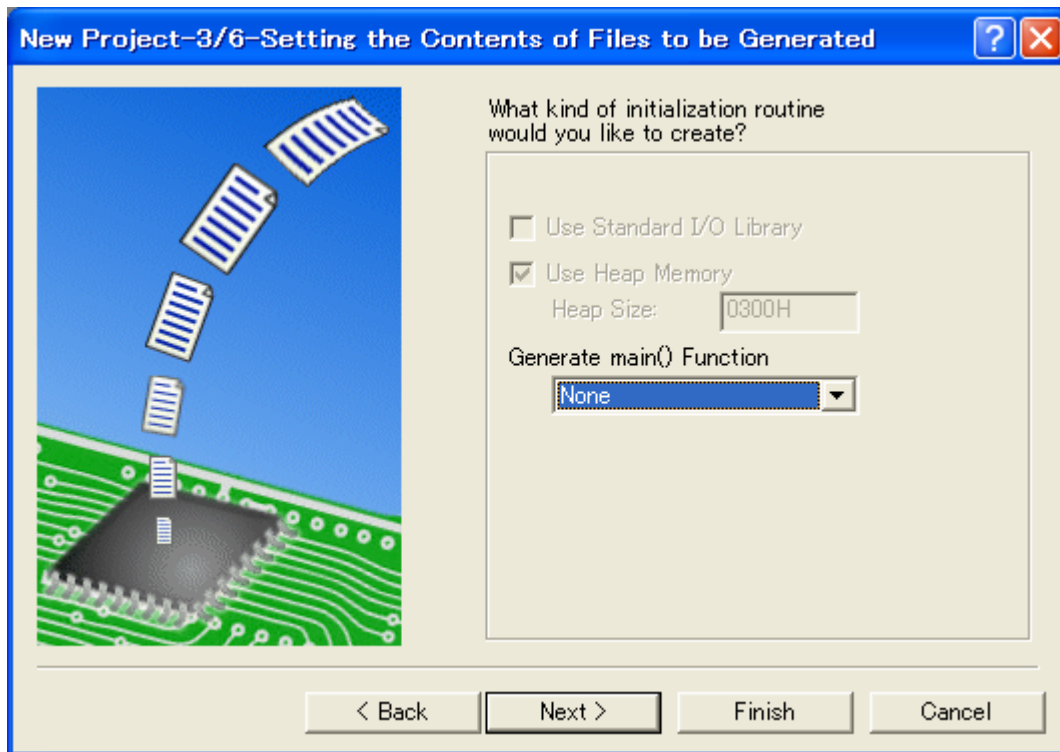   According to the operating environment, set up CPU series, CPU type and the toolchain version.

3. Selection of RTOS
   In the dialog on New Project-2/6-Select RTOS, select "MR100" from the RTOS item. For the
   startup file type, select "Default C Linkage".
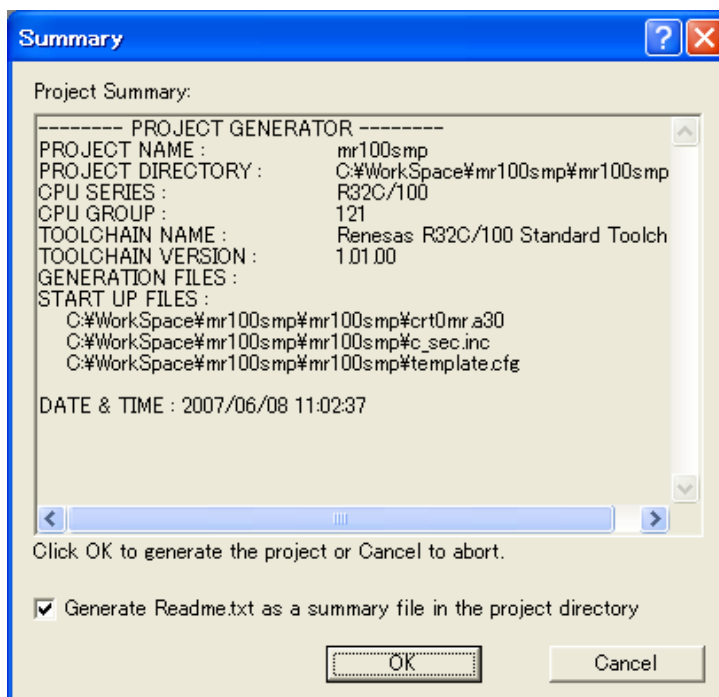
4. Generated File Setting
   Select "None" in "Generate main ( ) Function".
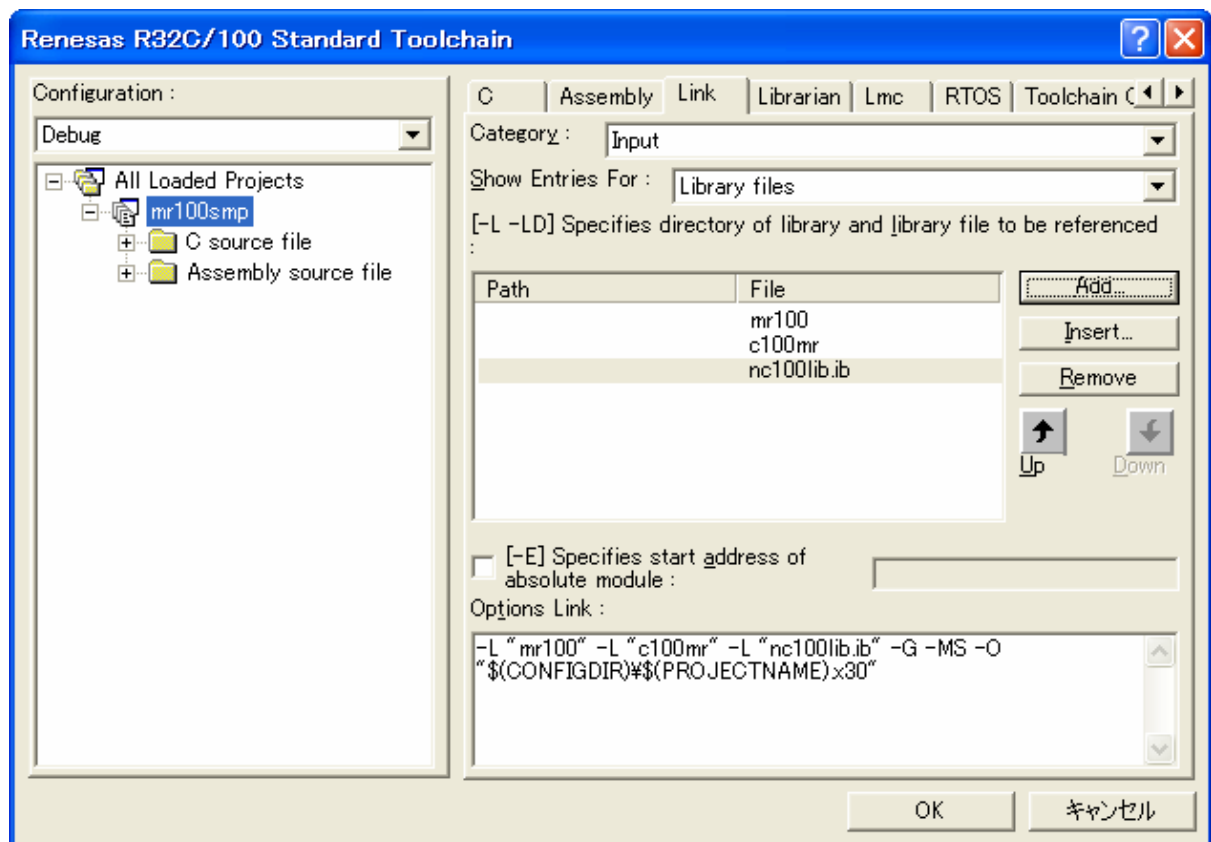

5. Completion of Project Generation
   When a sample program is built, no subsequent selection is required; therefore, press the "Finish" button.
   Since the project summary is displayed as shown below, press the "OK" button located in the low-ermost part to generate the project.

6. Link Option Setting
   In the case that the standard library is used, specify "nc100lib.lib" as well.

7. Ading Sample Program File to Project

Add "demo.c" and "smp.cfg" provided in the sample program to the project. Delete the sample configuration file "template.cfg" already registered from the project, and add "smp.cfg" to the project.

In cases where the cfg file was generated with the GUI configurator, register the cfg file thus generated in the project.
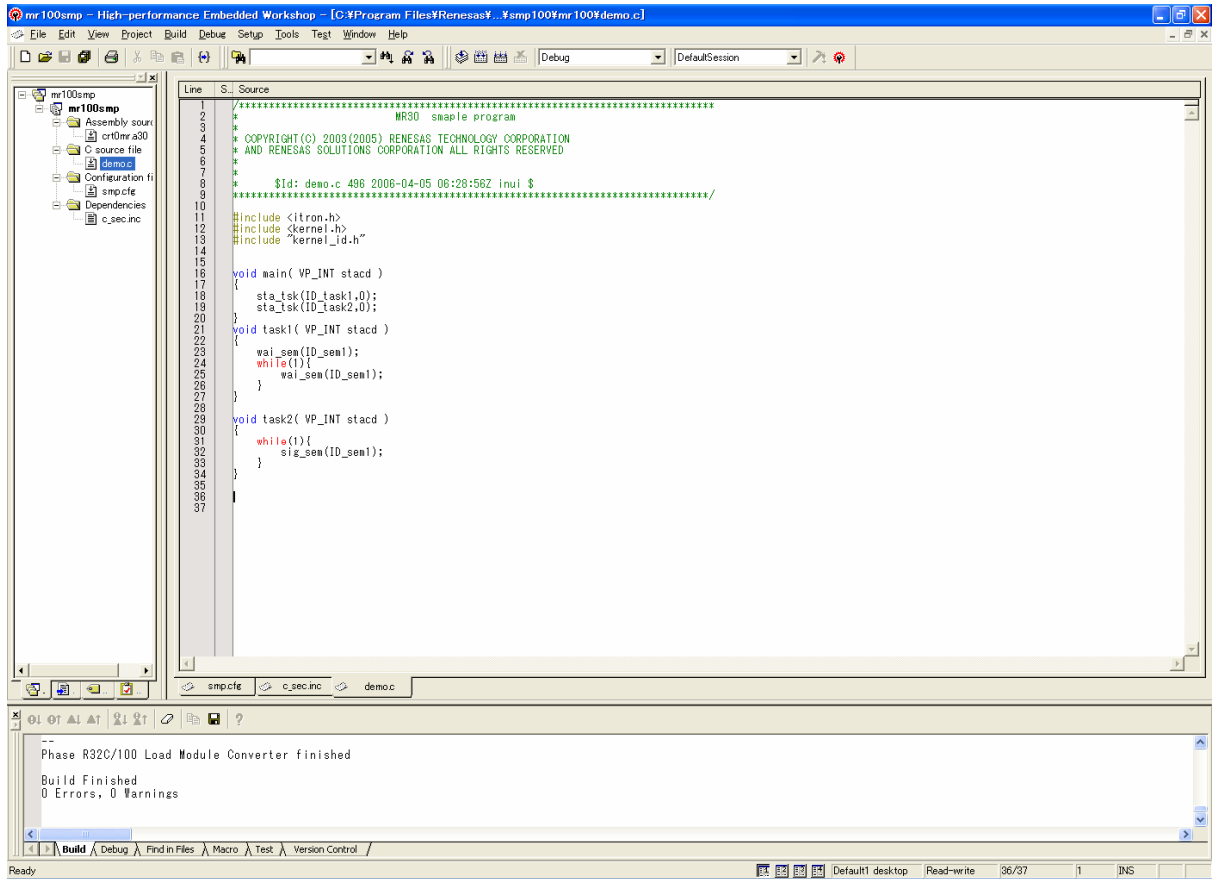
8. Execution of "Build"

Select "Build " -> "Build All" to execute Build.

8. Use of GUI Configurator

1. Execution of GUI Configurator

   From the Start menu, select [MR100 GUI Configurator] from the [Renesas] -> [M3T-MR100K (or S) V.1.00 Release 00] to start up the configurator.

   Also, when "Guiconfig_mr100.exe" in the "bin" directory under the MR100/4 install directory is executed, the GUI configurator starts up.

2. GUI Configurator Manual

   For the GUI configurator,   the user's manual is prepared in the Help format. From the GUI screen of GUI configurator or by selecting [MR100 GUI Configurator HELP] from [Renesas] -> [MR100K (or S) V.1.00 Release 00], the Help can be referenced.

9. Cautions

9.1. About extern declaration or prototype declaration of service call

Don't describe extern declaration nor prototype declaration if service call is issued from your program.

9.2. About compatibility information for Windows Vista

When the M3T-MR100/4 is installed in a system folder such as "Program Files", the kernel cannot be compiled. So, copy the folder which includes kernel program source files to a rewritable folder; not a system folder.

10. Corrections to the User's Manuals

10.1. "8.1.2 Configuration File Definition Items [(System Clock Definition Procedure)]"

● Original:

1. MPU clock

[(Definition format)]	Frequency(in MHz)
[(Definition range)]	None
[(Default value)]	15MHz

   Define the MPU operating clock frequency of the microcomputer in MHz units.

2. Timers used for system clock

[(Definition format)]	Symbol
[(Definition range)]	A0, A1, A2, A3, A4, A5,A6,A7,B0, B1, B2, B3, B4, B5, OTHER, NOTIMER
[(Default value)]	NOTIMER

   The frequency of the circumference functional clock supplied to a system timer is defined per MHz. With this product, f1 or f8 is chosen as count sauce, and a value is set as a timer Ai register and a timer Bi register. Therefore, overflow may occur depending on the value of timer_clock, and the value of tick_nume of a system definition. In this case, OTHER must be set as the timer used for a system clock, and a system timer must be initialized by the user side.

   If you do not use a system clock, define "NOTIMER."

● The above should be:

3. Timer clock

    【(Definition format)】   Frequency(in MHz)

    【(Definition range)】   None

    【(Default value)】   15MHz

The frequency of the circumference functional clock supplied to a system timer is defined per MHz. With this product, f1 or f8 is chosen as count sauce, and a value is set as a timer Ai register and a timer Bi register. Therefore, overflow may occur depending on the value of timer_clock, and the value of tick_nume of a system definition. In this case, OTHER must be set as the timer used for a system clock, and a system timer must be initialized by the user side.

4. Timers used for system clock

    【(Definition format)】   Symbol

    【(Definition range)】   A0, A1, A2, A3, A4, A5,A6,A7,B0, B1, B2, B3, B4, B5,

    OTHER, NOTIMER

    【(Default value)】   NOTIMER

Define the hardware timers used for the system clock.

If you do not use a system clock, define "NOTIMER."